CLAIMS

What is claimed is:

1. Method of operating a computer system with a central processing unit and a memory system coupled to said central processing system, said memory system comprising a plurality of memory module slots for receiving of memory modules, wherein each memory module comprises a random access memory section and a non-volatile memory section, said method comprising the steps of:

- detecting a memory error;
- analyzing said memory error, determining a memory module in which said error occurred and creating a log; and
- storing said log in said non-volatile memory section of said memory module.

2. Method according to claim 1, wherein said memory error is detected during a diagnostic test.

3. Method according to claim 1, wherein said memory error is detected during normal operation.

4. Method according to claim 1, wherein said log comprises information about the error type.

5. Method according to claim 1, wherein said log comprises information about the location of the memory module.

6. Method according to claim 1, wherein said log comprises information about the date and time when said error occurred.

7. Method according to claim 1, wherein said log comprises information about the system identification.

8. Method according to claim 1, wherein said log is stored in a cyclical manner.

9. Computer system comprising:

- a central processing unit;
- a memory system coupled with said central processing unit comprising a plurality of memory module slots for receiving of memory modules, said memory module comprising a random access memory section and a non-volatile memory section;
- means for detecting an error in said memory system;
- means for generating a log about said error; and
- means for storing said log in said non-volatile memory section of a memory module.

10. Computer system according to claim 9, wherein said means for detecting an error generate an exception within said central processing unit.

11. Computer system according to claim 9, wherein said non-volatile memory is divided in a plurality of sub sections each sub section storing one log.

12. Computer system according to claim 11, wherein said sub sections are written in a cyclical manner.

13. Computer system according to claim 9, wherein said log comprises information about the error type.

14. Computer system according to claim 9, wherein said log comprises information about the location of the memory module.

15. Computer system according to claim 9, wherein said log comprises information about the date and time when said error occurred.

16. Computer system according to claim 9, wherein said log comprises information about the system identification.

17. Method of operating a module within a computer system comprising a non-volatile memory section, said method comprising the steps of:

- detecting an error during an access to said module;
- analyzing said error and creating a log; and
- storing said log in said non-volatile memory section of said module.

18. Method according to claim 17, wherein said error is detected during a diagnostic test.

19. Method according to claim 17, wherein said error is detected during normal operation.

20. Method according to claim 17, wherein said log comprises information about the error type.

21. Method according to claim 17, wherein said log comprises information about the location of the module.

22. Method according to claim 17, wherein said log comprises information about the date and time when said error occurred.

23. Method according to claim 17, wherein said log comprises information about the system identification.

24. Method according to claim 17, wherein said log is stored in a cyclical manner.

25. Computer system comprising:

- a central processing unit;
- at least one system module coupled with said central processing unit comprising a non-volatile memory section;
- means for detecting an error in said system module;
- means for generating a log about said error; and
- means for storing said log in said non-volatile memory section of said system module.

26. Computer system according to claim 25, wherein said means for detecting an error generate an exception within said central processing unit.

27. Computer system according to claim 25, wherein said non-volatile memory is divided in a plurality of sub sections each sub section storing one log.

28. Computer system according to claim 27, wherein said sub sections are written in a cyclical manner.

29. Computer system according to claim 25, wherein said log comprises information about the error type.

30. Computer system according to claim 25, wherein said log comprises information about the location of the system module.

31. Computer system according to claim 25, wherein said log comprises information about the date and time when said error occurred.

32. Computer system according to claim 25, wherein said log comprises information about the system identification.